

IN THE CLAIMS:

This version of the claims replaces and supercedes all prior versions of the claims.

1.-7. (Cancelled)

8. (Original) ~~The orthogonal frequency division multiplex modem circuit according to claim 4,~~
An orthogonal frequency division multiplex modem circuit which uses a plurality of subcarriers for communication, and transmits and receives a plurality of communication channels, each of said plurality of communication channels is capable of transmitting and receiving different types of communications from the other of said plurality of communication channels, where each type of communications has different bit rates, QoS (Quality of Service) and priorities which are caused by said different types of communications, said plurality of subcarriers are divided into groups and each of said groups are assigned one group per each of the plurality of communication channels, respectively, said orthogonal frequency division multiplex modem circuit includes in a transmitting side, means for randomizing alignment of the respective subcarriers on a frequency axis, and in a receiving side, means for de-randomizing a signal where the alignment is randomized, and wherein the processing for randomizing positions of the respective subcarriers is updated every symbol.

9. (Original) The orthogonal frequency division multiplex modem circuit according to claim 8, wherein means for determining the randomization pattern every symbol and transmitting the

randomization pattern every symbol to the receiving side is included in the transmitting side, and means for synchronizing transmission and reception of the randomization pattern is included.

10. (Original) The orthogonal frequency division multiplex modem circuit according to claim 9, wherein a predetermined communication channel and a subcarrier corresponding thereto are assigned as the means for synchronizing transmission and reception of the randomization pattern.

11. (Original) The orthogonal frequency division multiplex modem circuit according to claim 10, wherein the predetermined communication channel and the subcarrier corresponding thereto are excluded from the randomization process.